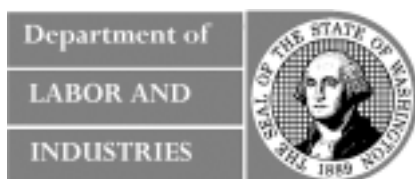


# SURVEILLANCE FOR OCCUPATIONAL LEAD POISONING

State of Washington, 1993-2001



Incorporating data from  
May 15, 1993 through June 30, 2001



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## Occupational Lead Exposure Registry Report of Surveillance Activities, 1993-2001

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Technical Report Number 44-3-2001

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Suggested citation for this report:

Whittaker, SG and Curwick, CC: Surveillance for Occupational Lead Poisoning, State of Washington 1993-2001: Incorporating data from May 15, 1993 through June 30, 2001. Technical report 44-3-2001. Safety & Health Assessment & Research for Prevention, Washington State Department of Labor and Industries, Olympia, Washington.

December 2001

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# Acknowledgments

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The contributions, review, and comments of the following SHARP staff are gratefully acknowledged:

David Bonauto, MD, MPH (Associate Medical Director);  
Marty Cohen, ScD, CIH (Industrial Hygienist);  
Catherine Connon, PhD (Public Health Advisor);  
Michael Foley, PhD Candidate (Economist);  
W. Marc Leastman (Database Manager);  
Hieu Pham (Data Coordinator),  
Syed M.A. Shah, MD, PhD (Data Research Manager); and  
Barbara Silverstein, PhD (Research Director).

This report was supported in part by Cooperative Agreement number 1 U01 OH07292-01 “Development of Core State-Based Surveillance Model Programs” and Cooperative Agreement number U60/CCU008413-06 “Adult Blood Lead Epidemiology Surveillance Program” from the National Institutes of Occupational Safety and Health (NIOSH). The contents of this report are solely the responsibility of the authors and do not necessarily represent the official views of NIOSH and the Center for Disease Control and Prevention.

## **List of Definitions and Acronyms**

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ABLES.....	Adult Blood Lead Epidemiology and Surveillance –a NIOSH program
ALERT.....	Adult Lead Exposure Reduction and Testing – a project conducted by SHARP
BLL.....	Blood lead level
BLT.....	Blood lead test – reporting form
BOC.....	Bureau of Census
CSTE.....	Council of State and Territorial Epidemiologists
DOH.....	Washington State Department of Health
CDC.....	Centers for Disease Control and Prevention
FTE.....	Full Time Equivalent
IRB.....	Institutional Review Board
L&I.....	Washington State Department of Labor and Industries
NIOSH.....	National Institute for Occupational Safety and Health
OSHA.....	Occupational Safety and Health Administration
PI.....	Prevention Index
Registry.....	Occupational Lead Exposure Registry
SHARP.....	Safety & Health Assessment & Research for Prevention
SIC.....	Standard Industrial Classification
WAC.....	Washington Administrative Code
WC.....	Workers' Compensation
WIC.....	Washington Industrial Classification - risk class from the WC database
WISHA.....	Washington Industrial Safety and Health Act
µg/dl.....	Micrograms per deciliter of whole blood – the unit of measurement for blood lead levels

## Executive Summary

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This report summarizes the reporting of adult blood lead levels (BLLs) from May 1993 through June 30, 2001 to the Occupational Lead Exposure Registry (Registry). The Registry is maintained by the Safety & Health Assessment & Research for Prevention (SHARP) Program at the Washington State Department of Labor and Industries (L&I). The Registry's purpose is to track lead exposure in Washington workers and promote activities that prevent lead overexposure and poisoning in Washington workers. Through June of 2001, the Registry database received 46,291 reports of blood lead levels (BLLs) from 32,049 individuals. Although most BLLs are in line with the national goal to keep workers' blood lead levels under 25 µg/dl, approximately 3% of the cases, representing 1092 individuals, had elevated BLLs. The extent of case follow-up is determined by the individual's BLL, with the highest levels receiving the greatest amount and most individualized follow-up. In this period, 763 individuals with elevated BLLs were mailed educational materials concerning the health effects of lead overexposure and ways to prevent it. Case interviews were completed for 171 individuals. Follow-up efforts also extend to the case's health care provider and employer.

While the total number of BLL reports submitted to the Registry has increased steadily since 1993, the number of elevated BLL reports has been decreasing over time. This finding has important public health implications, and may reflect increased public awareness about the hazards of lead, greater implementation of public and workforce control measures, and/or a general decrease in ambient environmental lead.

The SHARP Program believes that surveillance data should not be collected merely to document overexposures or health effects. These data should be used to target exposed workers and industries for public health intervention. Consequently, this report describes a novel approach to setting intervention priorities for lead-using industries (the Prevention Index) and discusses the limitations of relying solely on cumulative numbers (frequencies) of elevated BLL reports.

In summary, the data collected through Registry activities serve a vital role in the surveillance of occupational lead overexposure and poisoning in Washington State and contributes to national surveillance efforts. No other agency in Washington State collects information on adult BLLs. The information has helped the SHARP Program identify industries and occupations in which workers are experiencing overexposures to lead so that prevention efforts can be directed appropriately.